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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/645,266	08/21/2003	Patrick E. Godici	37,335	7346

7590 12/01/2005

BP America Inc.
Docket Clerk, BP Legal
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Warrenville, IL 60555

EXAMINER

SHAH, CHIRAG V

ART UNIT	PAPER NUMBER
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1714

DATE MAILED: 12/01/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/645,266

Applicant(s)

GODICI ET AL.

Examiner

Chirag V. Shah

Art Unit

1714

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 25 Novemeber 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-14 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-14 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION***Claim Rejections - 35 USC § 102***

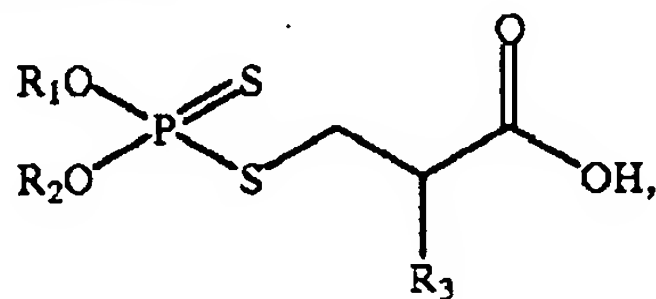
(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

1. Claims 1, 2, 4-13 rejected under 35 U.S.C. 102(b) as being anticipated by Camenzind et al (US 5,922,657, cited on IDS filed 8/21/2003).

With respect to claims 1,2, 4-7 and 9-13 Camenzind et al ("Camenzind") discloses a lubricant composition comprising (A) a major amount of base oil, including synthetic oils such as poly- α -olefin and ester oils, (B) from 0.005 to 1.0% (col. 3, lines 40-44) by weight of at least one compound of **Formula I** set forth in column 1, lines 55-64, and (C) other additives; including metal passivators e.g. tolutriazole, benzotriazole or combinations thereof, set forth in column 6, lines 30-42.

It is the examiner's position that one embodiment of Camenzind's Formula I (see structure below) anticipates applicant's disclosure of (DITMPA) in the claims.

Formula I

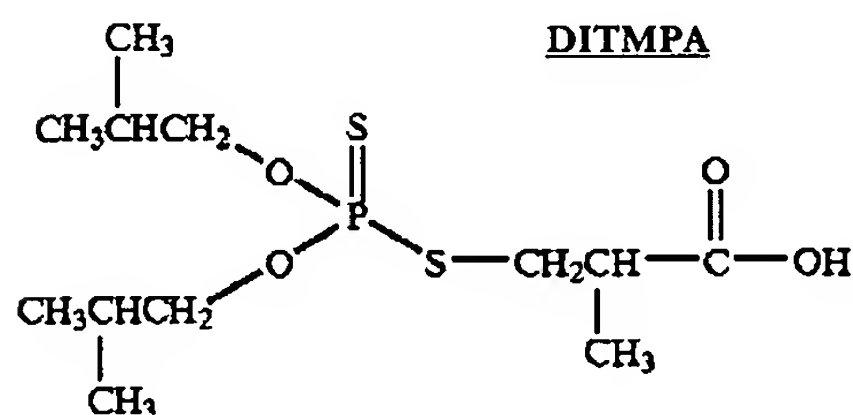


In Formula I R_1 and R_2 are groups selected independently from C_3 - C_{18} alkyl.

Particular attention is drawn to the fact that the preferred embodiment of R_1 , R_2 is i-butyl (col. 2,

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lines 10-22), R_3 is hydrogen or methyl (abstract). Thus when the R_1 and R_2 is i-butyl and R_3 is methyl, Camenzind's embodiment has the formula:



This embodiment is clearly identical to the presently claimed compound DITMPA. Additional evidence of the identity of Camenzind's and applicant's compound is given by the fact that both structures share the identical CAS Registry Number, 268567-32-4.

With respect to claim 8, i.e. the use of the presently claimed composition to enhance load-carrying capacity and oxidation/corrosion stability, Camenzind teaches that the advantages of the Formula I composition "lie in the antiwear properties and, in particular, in the very good load-bearing properties, especially for hydraulic and transmission fluids," moreover, the ability to "... minimize any negative side effects such as corrosiveness for copper and ... corrosion protection potential is provided" (col.9, lines 31-36 and col.10, lines 1-3).

Camenzind's synthetic base stock comprise lubricants based on "aliphatic or aromatic carboxyl esters, polymeric esters, polyalkylene oxides, phosphoric esters, poly- α -olefin or silicones, on a diester of a dibasic acid with a monohydric alcohol, for example dioctyl sebacate or dinonyl adipate, on a triester of trimethylolpropane with a monobasic acid or with a mixture of such acids, for example trimethylolpropane tripelargonate, trimethylolpropane tricaprylate or mixtures thereof, on a tetraester of pentaerythritol with a monobasic acid or with a mixture of

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such acids, for example pentaerythritol tetracaprylate, or on a complex ester of monobasic and dibasic acids with polyhydric alcohols, for example a complex ester of trimethylolpropane with caprylic and sebacic acid or a mixture thereof. Particularly suitable examples other than mineral oils are poly- α -olefins, ester-based lubricants, phosphates, glycols, polyglycols and polyalkylene glycols", and mixtures thereof (col. 3, lines 11-27).

In light of the above, it is clear that Camenzind et al anticipate the presently cited claims.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 3 and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Camenzind et al (US 5,922,657) in view of Ashcraft, Jr. et al (US 5,503,761).

The discussion in paragraph 1 above, with respect to Camenzind, is incorporated herein by reference.

Prior to setting forth the rejection, it is noted that applicant's claimed phraseology "technical pentaerythritol" is construed to mean "technical grade" pentaerythritol.

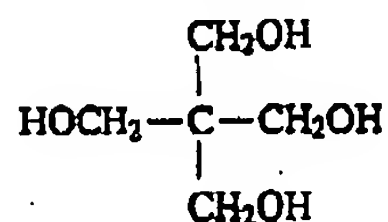
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While Camenzind teaches a synthetic base stock composition including a pentaerythritol and mixture of carboxylic acids, it is silent to the use of the pentaerythritol being technical pentaerythritol.

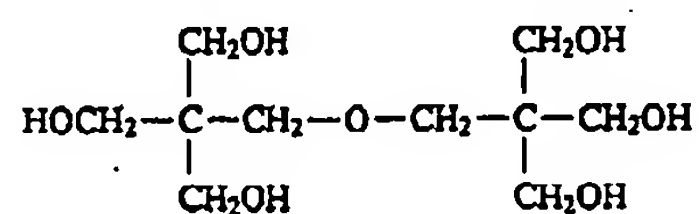
Ashcraft discloses a synthetic ester base stock having technical pentaerythritol and a mixture of carboxylic acids for use in turbine oil stock. The mixture of carboxylic acids comprises C₅-C₁₀ carboxylic acids. (abstract, col.1, lines 34-51).

Moreover, the technical pentaerythritol is a mixture of about 85% to 92% monopentaerythritol and 8% to 15% dipentaerythritol. Ashcraft prefers using a "typical commercial technical pentaerythritol with about 88% monopentaerythritol (see structure below) and about 12% of dipentaerythritol (see structure below),...may also contain some tri- and tetrapentaerythritol" (col.2, lines 20-43).

MONOPENTAERYTHRITOL 88%



DIPENTAERYTHRITOL 12%



Given that Ashcraft, Jr. et al is in the same field of endeavor as Camenzind (e.g. development of lubricant oil compositions) it would have been obvious to utilize a technical pentaerythritol with about 88% monopentaerythritol and about 12% of dipentaerythritol especially because of the advantage technical pentaerythritol has in reducing deposit formation properties in the "lubricant systems of modern commercial gas turbine engines, technical pentaerythritol esters are important to the improved performance of the lubricant in these engines" (col. 2, lines 2-6). Because this advantage was known at the time of applicant's

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invention, it would have been obvious to one of ordinary skill in the art to use technical pentaerythritol in the amounts disclosed instead of the pentaerythritol per se in Camenzind's invention and thereby arrive at the present claims.

Correspondence

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Chirag V. Shah whose telephone number is 571-272-2766. The examiner can normally be reached on M-F 7:30am to 4pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vasu Jagannathan can be reached on 571-272-1119. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

CVS
11/28/2005

Vasu Jagannathan
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SUPERVISORY PATENT EXAMINER
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